social and farm forestry programmes in karnataka
a pilot study report

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SOCIAL AND FARM FORESTRY PROGRAMMES IN KARNATAKA: A PILOT STUDY REPORT

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I N T R O D U C T I O N

In Karnataka, Social and Farm Forestry programmes are in operation since 1976. Presently the Government of Karnataka has made efforts to utilise wastelands and barren lands in drier areas of the State. An integrated study has been proposed to examine the impact of forestry programmes on the environment, lives, status and struggles of rural millions, especially the poor.

This report has a limited objective of checking our hypotheses, schedules and methodology in the field context. This report is neither scientific nor systematic, but an appraisal prior to commencing our final field work.

We must acknowledge our sense of deep gratitude to Dr Ravi Narayan who initiated us into this study. A list of all those who had given us a valuable helping hand in clarifying our concepts, approach etc is given elsewhere in this report. We are very grateful to them. Finally, our sincere thanks are due to our respondents who patiently replied to our querries and clarifications.

We welcome comments and suggestions.

Bangalore 560 001
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Centre for Non-formal
and Continuing Education

INTRODUCTION

OUR WHOLEHEARTED THANKS TO

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general concepts

the scheme

the research problem

objectives

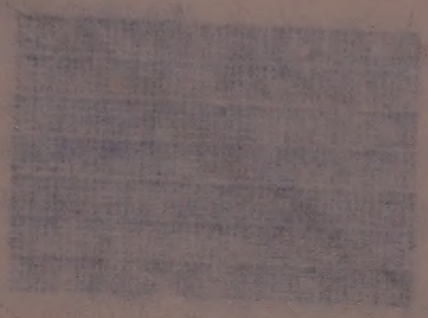
areas for study

survey of literature

the setting

area and methods of study

the sample design



> " In a very deep sense, land problems - tenure, utilisation, usufructs,.... - are <u>power problems</u> of disparity in economic, social, and political power ". 1/

Land, especially in the rural environment, is a means of livelihood, an economic asset, a security which can be used to raise 'spot cash' in case of emergencies, and a measure of social standing. Lack of educational facilities, alternate job opportunities, the limited availability of cultivable land, increasing population coupled with the socio-economic norms and values have increased the dependency of villagers on land and created the problem of land hunger resulting in a large proportion of landless households and a significant proportion of households with uneconomic holdings; a small portion of people hold substantial quantum of productive land.

The type of land-use and its' usufructuary arrangements constituted a significant determinant of the economy of the people and a specific economic power perpetuated a particular type of relationship both social and political. This mutually dependent relationship clearly manifested itself in the feudal society, colonial society, communal society and the agricultural society where a limited self-sufficiency was permitted by the State.

Unlike developed countries - where the drastic decline of the importance of agriculture in the national economy has sharply reduced the political significance of land holding, land use pattern, usufructuary arrangements,.... - the developing countries find that these factors still exercise a commanding political influence.

1/ 'Land Reform and Agricultural Development' in KA Parsanas et al; Land Tenure (1956) Madison, Wisconsin.

But, in contrast to their historical experience, in which politics and State simply kept perpetuating the existing pattern of these factors, many developing countries face today a situation in which there is a constant demand in the realm of socialisation of the resources. Frequently such demands are met with serious disturbances in the existing land holding pattern, land use pattern, usufructuary arrangements.

THE SCHEME

One of the most enlightening concepts of the 20th century has been the growing appreciation of the complexity of the forest biomass and the part it plays as the "guardian" of rural folks' livelihood. In spite of this awareness or perhaps for lack of it, the calamitous destruction of forests and trees continues. It has been estimated that, in a century, 10 to 16 sq. kms (1 to 1.5 billion hectares) of earth may be reduced to unproductive wasteland.

It is in this context of continued deforestation that a reciprocal interaction (ie) a simultaneous afforestation scheme came into being. This reciprocal interaction scheme was fashionably named as 'Social Forestry', 'Agro-forestry', 'Community Forestry',.....

Whatever be the terminology the concept appears to be vague and formless. But several States in India have adopted this programme. Programme manuals presented by the various States fail to present a definition of Social Forestry et al.

If one glances through the available literature on the subject, a comprehensive definition (of course, meaningful in many respects) is found in "WNI Perera's Some thoughts on Social Forestry in Sri Lanka, 1984".

"Community or Social Forestry can be defined as forestry (and by forestry is meant all services - both quantifiable and non-quantifiable provided by a forest) for, by or through a local community, villages or a group of villages, .../3

a certain number of individual settlements or settlers, a single settlement or even a single settler. The objective is the production of goods and services to meet the needs of the local community. The inputs for such a project would come primarily from the local communities. This practice of social forestry should be coupled with extension forestry services to the community or individual settlers".

In view of our past programme experiences, it is relevant to ask here a few questions :-

a. What the actual achievements have been ?
b. What have been the pattern and strategies of its implementation ?
c. Where are these forests ?
d. What benefits have accrued to the rural milieu ?
e. Has Social Forestry in fact been practised although the concept was not consciously recognised both in rural and urban areas ?
f. Has this practice ceased to be in vogue with land-holdings dwindling in area, and because of technological and economic factors ?
g. What has been its' contribution in relieving the burdens caused by over-dependence on the use of non-renewable energy resources ?
h. How has its' practice helped in shaping the environment ?
i. Or, could we conclude that, like the carpet knights of yore, many of the community Social Forestry advocates have been merely drawing room community social foresters, living in a heady world of mere nebulous prognostications ?

Despite social forestry programmes every one agrees that the present galloping inroads into the woody trees resources, be it to quench an energy thirst, a land hunger, for industrial purposes, or for some other reason, would soon result in the forest or the woody trees not only being a rarity for the urban dweller but also not being even a part of the rural landscape except in the deep hinterland.

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Two basic interrelated problems which exist throughout the Third World and have been a major factor in land denudation and environmental imbalance are :-

a. a heavy dependence on a limited number of energy resources including imported energy, thereby causing severe economic stresses;

b. indiscriminate use of wood as an industrial raw material, coupled with heavy competition from other traditional uses of wood, and competition for the land that carries this renewable resource.

Its a concern. Current concern is preceded by a long succession of theories and practices both from Government and voluntary agencies. Yet, for all of their concern and frequent insights, observers are handicapped in several ways. First, they lacked the necessary specialised knowledge and analysis duly backed by concrete data-base. Second, their 'models of land use' were relatively under-developed, various 'sovereign concepts' have been employed at different times to describe the essential characteristics of land use. Third, determining sources of bio-mass availability of any area is relatively traditional; it has become complex due to a variety of claims putforth by the policy makers. This is further complicated by programmes initiated by the Government ostenibly meant to meet the fuel and fodder needs of the rural millions.

The multi-determined, contextual, and interactive view of land problems, which is now more routinely assumed, is a fairly recent development in the analysis of them. But these conceptual advances should not be viewed apart from the changes in observational stand-points that accompanied and frequently preceded them. Yet, given that these advances have only recently been the basis of systematic research over theory, concepts and methods is neither unexpected nor undesirable.

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In the matter of availability of resources, it is the shortage of the industrial sectors' requirements which is always drummed up. This results in the allocation of resources favouring industrial needs for several reasons and this also takes several forms. The industrial bias is that an indefensible share of resources and services are systematically allocated to industry ignoring the possibility of achieving the optimum benefit if the same are to be allocated to the rural areas. The process combined with so structuring of the development policies as to provide rural people with inefficient and unfairly share. These biased policies have destabilised once self-sufficient rural communities (however, poor they had been in the past !) bringing in more disparities.

Further, current research efforts on various aspects on land seem to concentrate predominantly on its economic implications and consequences. Many published works on the subject are almost exclusively concerned with the clarification of the relationship of land tenure, land usage pattern, usufructuary arrangements to agricultural development and industrialisation. Some of these works, it is true, contain numerous references on casual relationships between land reforms, land use pattern, usufructuary etc, and such political values as stability, democracy, socialisation, justice and equality. However, bio-mass needs of the area and their relationship to land (land problems ?) is not studied. When taken up, they invariably stop short of an attempt at theorising such relationships on the basis of broad empirical evidence. Thus, no work has yet examined comprehensively and comparatively the (politics of) land problems and bio-mass needs of any area, on a specific programme-to-programme basis.

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STATEMENT OF RESEARCH PROBLEM

This study represents an effort to analyse comprehensively the processes and effects of the afforestation programme - named as "Social Forestry" and "Farm Forestry" - sponsored by Overseas Development Association of UK and World Bank. This programme aims to bring waste lands and barren lands under productive use.

Further, Government of Karnataka has formed a joint sector company 'Karnataka Pulpwood Limited' along with m/s Harihar Polyfibres Ltd. This joint sector company has been allocated 75,000 acres of 'C' and 'D' class of land along with other waste lands for cultivating eucalyptus to meet the needs of raw material of m/s Harihar Polyfibres Ltd.

These two programmes together bring in 125,000 acres of land under afforestation, possibly with species selected by the Forest Department; nevertheless, as agreed with World Bank and ODA, fifty percent of plantations will be of eucalyptus.

BROAD OBJECTIVES OF THE STUDY

The study aims to provide :-

1. An insight into patterns of
   a. land dynamics and emerging trends;
   b. land use, usufructuary arrangements with special reference to wastelands and barren lands;
   c. sources and quantum of bio-mass availability.
2. A framework and perspective for formulating a concise people-oriented developmental plans within the village, taluk and State context.
3. A data base for continuing work, both pure and applied.

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AREAS FOR RESEARCH

Some of the areas identified for study are :-

1. administrative and operational infrastructure;
2. the techniques;
3. the quality and magnitude of political "participation and its impact";
4. the impact of differing, social, economic, political and ecological conditions on the strategies adopted. How they dovetail into an array of situations ?
5. the expertise and their degree of practical experience;
6. the operational model and the strategies that have evolved, bearing in mind that community forestry was a fairly vague concept (though not admitted) with limited experience in its operation, thereby necessitating that its practice be an evolutionary process;
7. the 'sub-conscious practice' of community social forestry in many rural areas;
8. the role played by government and other institutions - active participant-advisor or as a catalyst;
9. the executing authorities - their functions, training they had, the degree of control, their social commitment, their involvement in the programme operations, innovativeness.
10. Cost/benefit analysis of both the direct, tangible services provided and the indirect services;
11. amelioration of perturbed environment;
12. maintenance of environmental balance (eg. soil and watershed protection; micro-climate). Qualitative and where possible, quantitative assessment;
13. impact on rural economy, including employment;
14. the overall improvement in the quality of life. Is material adequacy coupled with environmental tranquility being achieved;

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15. a definition of community social forestry within the ambit of forestry in its broadest sense and determining the role of it in a more practical way;
16. relating the schemes to biomass needs and availability in the rural areas;
17. emerging land dynamics in the areas;
18. how does social forestry programme fit in with other intervention programmes of the Government say NREP.

The above list is <u>not exhaustive</u> but only <u>inclusive</u>. Covering all the areas listed above will be voluminous and time consuming. Hence, keeping the areas listed in mind the study would <u>specifically aim to</u> :-

1. Present availability of waste lands, mode of utilisation, usufructuary arrangements and beneficiaries of the produces in study areas;
2. determine programme-effects on the biomass needs of the rural population, especially the poor;
3. it would explore viable alternatives to the present programme which would be beneficial to the rural poor and narrow down the existing inequalities.

In assessing the effects of the programme, the study would focus its attention on :-

a. present sources of biomass availability for the rural population
b. project increase or decrease in biomass availability and reasons therefor;
c. the extent of destabilisation of the rural household, disparities, if any, leading to increased inequality vis-a-vis biomass needs;
d. uses of the produces of the species suggested under the programme by the policy makers - its marketability, suitability ....
e. any structural changes foreseen in agrarian relationships.

In dealing with the processes of the programme, the study will have to identify, explain and where possible quantify the factors.

The study would focus on the entire spectrum of degradation, environmental perturbation and remedial amelioration and present the results in intelligible terms to the public, the rural folk and urban dwellers, policy makers alike, so that the society could take serious cognizance of the dangers that threaten their very existence and make forestry their own business/concern. In short, it would aim that the forestry should become everybody's business and not the business of foresters alone; it would also portray the major role that forests and trees play in maintaining the social fibre of communities, especially rural communities.

SURVEY OF LITERATURE

Several studies have been published on Social Forestry and other afforestation programmes. There are two divergent, unconfirmed conclusions. One, questioning the proprietory of the programmes; other, elucidating the benefits of the programme. There are some 'compromise' studies available.

On the basis of the available literature, following conclusions could be advanced :-

1. the initiation of these programmes depend upon the perceived need of the elite and industry in collusion with policy makers and planners;
2. the process of formulation of the programme is determined by the relationship between the State and the industry;
3. the extent of implementation of the programme varies with the degree of influence that the local pressure groups exert on land distribution pattern;
4. the programmes did not take into consideration biomass needs of the people in the area.

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The other section of the studies advance following conclusions :-

1. Forestry programmes have created additional employment in the areas;
2. programmes are undertaken where no other species could be grown; thus, more area under tree cover has come into being;
3. programme has also played a major role as a land-reforms' tool;
4. programme has increased bio-mass availability in the area;
5. there is stability in the local economy.

Rapid and large scale expansion of social forestry et al programmes in various regions of India has generated serious concern. Above divergent studies together with the magnitude of concern, however, has brought a polemics by claims made by the Government and various other agencies. Therefore, Social Forestry programme in Karnataka and its impact needs to be assessed with the following focus :-

a. influence on ecological processes;
b. basic bio-mass availability and needs of the people;
c. land reforms or land tenurial changes, if any.

Above focus is necessary either to confirm or disprove the published studies, and their relevant applicability in Karnataka.

THE SETTING

The total geographical area of the State of Karnataka is 191,791 sq.km. It has a population of 37 million (1981 Census). It has 27,028 villages inhabited and 2,362 villages uninhabited. On an average there are 1,380 persons per inhabited village.

Scheduled Castes and Scheduled Tribes constitute 19.98 percent to the total population (8,420,556 persons). They form 22.56 percent in the rural areas and 13.62 percent in the urban areas to the total population.

The State has a total geographical area of 190.5 lakh hec. of which the forest area (as legally defined) amounts to 38.4 lakh hectares, which is 20.15 percent of the total geographical area. Thus the percentage of forest area in the State is less than the all-India average (23 percent) and far less than the standard prescribed (33.33 percent) by the National Forest Policy, 1956.

Forest area in Karnataka at the commencement of the 7th F.Y.P.

(in lakh hectares)

Land category		Area
Total geographical area	..	190.5
Forest area (legally defined)	..	38.4
of which		
Reserve Forest area	..	28.6
Other Forest area	..	9.8
Unwooded forest area	..	11.4
Degraded forest area	..	13.5
Forest area with adequate stock	..	13.5

The percentage of forest area in the districts varies from 1.75 in Bidar district, the lowest, to 81.5 in Uttara Kannada district, the highest. The per capita productivity of forests in Karnataka is 0.025 hectares. The revenue yield of Karnataka forests was as high as Rs.2800 per sq.km. of forest area as against the all-India average of about Rs.720/-. per sq.km. during 1975; in 1983-84, it was Rs.4150/-. and Rs.935/-. respectively.

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Annually about 3.9 million M^3 of growing stock is being exploited. The details including the produce from the clear felling area (regeneration blocks) are as under :-

Recognised sources	Timber & Bamboo in million M^3	Firewood in million M^3
1. Sale of coupes	0.41	1.66
2. Sale through depots	0.18	0.15
3. Industrial concerns	0.48	0.35
4. Unrecognised sources	0.23	0.34
Total ..	1.40	2.50

The extent of forest area set aside (lost) for various purposes since 1956 to 1981 was 222,727 hectares.

TYPE OF FOREST AREA AND GROWING STOCK DATA

	Area in lakh hec.	Proportion of forest area (%)	Growing stock per hec M^3	Total growing stock million M^3
Evergreen & Semigreen	5.8	15.1	175	101.5
Moist deciduous	5.8	15.1	100	57.8
Dry deciduous	7.2	18.9	50	36.4
Scrub and throny	8.2	21.3	25	20.4
Unwooded	11.4	29.6	-	-
Total	38.4	100.0		216.1

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Land use in Karnataka shows a significant proportion of fallows and cultivable waste. Even in an agriculturally good year like 1978-79, together it formed 11.11 percent of total geographical area. Instead of declining, this proportion has increased over the 1960-61 level of 10.3 percent. The sharp increase since 1981 could be attributed to drought conditions. But such under-utilisation of land cannot be attributed to climatic conditions alone. In absolute terms, idle lands which are neither cultivated nor afforested increased from 20 lakh hec. in 1960-61 to 21.2 lakh hec. in 1978-79 and further to 25.2 lakh hec. in 1980-81, which is surprising in a land-hungry country like ours.

Net sown area has increased from 101.4 lakh hec. in 1960-61 to 103.2 lakh hec. in 1978-79, not at the expense of idle land but at the expense of permanent pastures and other grazing land. Significantly, net sown area has averaged out to @ 104.00 lakh hec. since 1980-81. This is a threat to the State's livestock economy, since these grazing lands have declined notably from 17.4 to 14.0 lakh hec. between these years, the level of 1980-81 being still lower at 13.5 lakhs hec. 2/

Karnataka's economy is heavily agriculture-oriented, though there has been steady decline in its overall share. The primary sector consisting largely of agriculture and allied activities and also mining and quarrying, accounted for 61.2 percent of the State income in 1960-61, but this declined to 46.4 percent in 1980-81. The preponderance of primary sector is apparent from the fact that even after the decline in the share of the primary sector, this sector accounted in 1981, for 65.1 percent of the total workforce.

2/ Karnataka State Gazetteer, Part I, 1983.
Chapter - Agriculture - Land utilisation in the State.

AREA AND METHODS OF STUDY

Our present study will cover eight districts : Bellary, Chickmagalur, Chitradurga, Dharwad and Shimoga; Bangalore, Kolar and Mysore. Geographically, the first set of five districts form a cluster wherein major portion of the present Social Forestry programme is planned to be implemented. In Bangalore, Kolar and Mysore the programme is in operation since 1976; thus, they technically form the second cluster. In terms of programme experiences, they show significant similarities and diversities. Facing a number of common problems, all these districts have demonstrated a need to increase fuel and fodder availability, employment generation schemes etc. On the other hand, they were inducted into the programme at various stages but with unique species presumably to meet divergent requirements.

This sample of districts is fairly representative of the State as a whole and sufficiently large enough to facilitate the formulation of some broadly relevant generalisations. However, in specific instances in which data collected from these districts are inadequate for analysis, pertinent information on other districts or States will be utilised.

Dealing with many districts, which display diversities in programme background and experience, this study will best accomplish its objectives by following a strictly analytic and comparative approach. A series of check points will be adopted to identify, interpret and evaluate the various aspects of the programme.. In order to keep the study concise, no attempt will be made to describe comprehensively the processes and effects of the sample on a village-to-village basis, but district-wise summary will be provided where it will help a more practical understanding of the operative models.

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SAMPLE DESIGN

First we had a plan to stratify the State into the ecological frame of core, intermediary, and periphery or to use grid-sampling with a view to emphasise ecological spatial stratification. On a review these two methods were discarded due to operational inconvenience, zonal bias involved and the variation in the extent of wasteland availability. Also, in a multi-disciplinary survey with multiple emphasises there can be no single variable correlated to all the variables considered in the study and hence stratification based on single criterion was avoided. But ecological frame of the programme was taken as one of the criteria in determining the sampling range.

Further, to strengthen the data collected two independent and inter-peneterating sub-samples using the two tier sampling design was decided to be introduced.

SELF-WEIGHING DESIGN

The simple, classical formula of self-weighing design to select the number of households in each of the sub-clusters will be worked out based on :-

$$m_i = 1/e \times N/n \times M_i, \text{ where}$$

m_i = number of households to be selected from the i_{th} sub-cluster;

e = inverse of the overall sample fraction;

N = number of blocks in the population;

n = number blocks in the sample;

M_i = number of households in the i_{th} sample sub-cluster.

m_i will be worked out for all sample Blocks of the two-tier samples. Then the i_{th} selected sub-cluster of each sample m_i household will be selected using random sampling with replacement option

Tentatively, sampling area is to be determined as follows :-

1. five percent of the villages which are selected for implementation of SF/FF programmes; in case of Cluster II, 4 villages per district where more than 100 acres of land are under plantation of any of the species suggested by the present SF/FF programmes;

2. the distance between taluk head quarters and the village will be considered in four ranges :-

    a. less than 10 kms.
    b. 11 to 20 kms.
    c. 21 to 30 kms.
    d. above 30 kms.

3. the number of households to be covered will be decided depending upon the size of the village. Normally, five percent of the household will be interviewed bringing in a balance of various social-economic factors;

4. to augment the information/data collected from household survey, a village profile would be compiled to provide a broader symptomatic picture. This is proposed to be collected through
(i) primary and secondary sources and
(ii) informal discussions at various levels like village elders, BDO, Panchayat Union Officials, Forest Department Officials and the like.

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pilot study : an overview

findings

appendix

references

PILOT STUDY : AN OVERVIEW

The Pilot Study was undertaken to :

a. prepare a base document on the proposed study that can be given to others for comment and criticism of the frame work;

b. provide a framework of what must be done and which materials have to be collected;

c. help orient our ideas in a form whereby it will be possible for us to look for flaws and inadequacies, if any.

The pilot survey covered 30 households distributed over 16 villages in the first-tier sampling. A minimum of 2 households per village was planned to be covered; this was not possible due to time constraints. "Deliberate sampling" concept was followed due to a variety of limitations.

In the second-tier sampling of villages - to prepare Village Profiles - 8 villages were covered, 2 in each of the districts in the main cluster wherein Household surveys were carried out.

The investigator had an opportunity to attend a Seminar on "Social Forestry" at Tavaragudi, Harpanahalli Taluk, Bellary district in which nearly 60 villagers from all over the State participated. This was utilised to have informal discussions with most of the participants.

During the visits we had informal discussions with 3 officials from Forest Department (working at the Range level), 2 School Teachers, 1 Panchayat Union Official and 1 Block Development Officer.

We also visited and studied "Firewood" marketing at two different places for 3 days.

LIST OF VILLAGES SURVEYED

District	Hobli	Village
Kolar	Tayalur	Sinigehalli
	Byrkur	Nangali
Bellary	Harpanahalli firka circle	Hadlageri
	Arsikeri	Ucuchangidurga
Mysore	Kandalike	Badaga
Dharwad	Hadleri Circle	Airani
		Aremallapur
Shimoga	Shikaripur	Punedahalli
	Avinahalli	Kalmane
Chikmagalur	Birur	Belliganur
		Aladahalli
Chitradurga	Kasba	Attikette
	Turvanur	Kunabevu

Firewood Markets at

Birur
Shikaripur
Sagar

Table No. 1 — **No. of families surveyed district-wise**

District	No. of respondents	Average size of family
Kolar	4	6
Bellary	6	7
Mysore	2	4
Dharwad	4	9
Shimoga	4	7
Chikmagalur	3	6
Chitradurga	3	8
Total	25	6.7

Table No. 2 — **Occupational Pattern**

Category	Primary		Secondary	
	No.	%	No.	%
Agricultural Labour	110	69.0	41	25.4
Coolie	27	17.0	96	59.2
Cultivation	12	7.6	-	-
Jeetha	2	1.3	-	-
Small trade	-	-	12	7.4
Caste occupation	6	3.8	13	8.0
Service	2	1.3	-	-
	159	100.0	162	100.0

The set of questions which were posed to the officials during the informal discussions were :-

a. How do they identify barren/waste lands at village level ?

b. How programme objectives are sent to their subordinates or at lower level officials or local people ? (mode of communication)

c. What type of resistance they have faced ? How did they overcome such resistances ? (at the village level)

d. How they propose to market the produces on maturity of every plantation ?

It is to be noted that though the 'deliberate sampling' concept was followed, a spatial integration to give a true representation to all areas was kept in mind.

The investigator was provided with a general guideline on the type of information to be obtained; but the exact formulation was largely his responsibility. During the Pilot Survey except for two schedules all others were carried out by one investigator. This had both merits and demerits.

On the merit side, there was constant reflection and the interviewing techniques were progressively improved; the interviewer adapted himself to the situation.

On the other hand, possibly single-man approach impeded creativity; further, limitations of the interviewer became the limitations of the interview and the results.

It took nearly 45 minutes to complete a household schedule, and 3 hours for the Village Profile.

Following is a gist of the survey, discussions and observations.

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Of the 30 Households interviewed, 5 filled-in schedules were discarded due to incomplete, and/or variation in the data presented. Hence, the final analysis of the survey covers only 25 schedules.

1 Family particulars

The 25 respondent-families interviewed had a total sample survey population of 172, giving an average family size of 6.7; this is a shade higher than the State and National averages of around 6.

The sample population consisted of 93 males and 79 females. Among them were 9 school-going children and 4 children below the age of 5 years.

Educationally, only 62 of the respondent-family members were literates; of these, only 2 had collegiate education, 17 upto Higher secondary level.

Occupationally, only 2 of the respondent-family members were employed in the "service sector"; others are dependent on agriculture in one way or other. Thus, the area sampled is predominantly agro-dependent.

69 percent of the respondent-family members indicated agricultural labour as their primary occupation whereas 25.4 percent indicated the same as secondary occupation.

27 percent of the respondent-family members earned their primary livelihood through manual labour (coolie) and 59.2 percent had the same profession as their secondary source of livelihood. Thus, most of them covered were "wage-earners" or "daily-labourers".

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These two sectors when combined contribute 86 percent in the primary sector and 84.6 percent in the secondary sector. This confirms that our study had an inherent bias of covering rural poor who basically derive their livelihood through agricultural operations.

Nature of employment

Quite predictably, majority of them being daily-wage-earners, their employment is seasonal. Only 6 among the respondent-family members pursued their caste occupation. It was understood during our discussions that many of them were cultivators and also were involved in caste-occupations in the past. Since two decades or so there has been a shift in their occupational pattern. (They often quoted 1964-65 drought as the cut-off period when they shifted their occupation).

A major point to note was that though the cultivated area has increased, the number of cultivators has decreased substantially. Further, pursuing caste occupation has also been reduced. These two simultaneous shifts have forced many people from the lower strata of the rural milieu to become labourers; it is not clear whether there is any corresponding increase in the demand for labourers in the area, if so in which fields.

As for as the tenure of employment is concerned, except the 2 who were employed in the service sector and have permanent source of income; others were employed either as daily-labourers or seasonal labourers.

Except 2 service people and 12 agricultural labourers others work within their village.

2 Land Holdings

Of those interviewed, only 2 respondents did not own cultivable land.. 12 respondents own cultivable land less than 1 hectare (marginal farmers in official parlance)

Table No. 3 Land holdings

(cultivable land)

	No. of Hdgs.	% age	Total area (in hec.)
None	2	8	—
Marginal farmer (less 1 hec)	12	48	16
Small farmer (2 hec & below)	5	20	9
Medium farmer below 5 hec)	3	12	11
Big farmer (5 hec plus)	3	12	23
Total	25	100	59

Other lands (waste lands, grazing lands and others)

	No.	In hec
Nil ..	19	-
1 hec and below ..	3	2.0
2 hec and below ..	1	1.7
2 hec. plus ..	1	3.5
5 hec. plus ..	1	6.5

Table no. 4 Total production in M.T. (from owned lands)

Produce p.a.	No. of resp.
nil	2
less than 0.75 MT	12
less than 2 MT	6
2 MT to 5 MT	2
5 MT plus	1
	22

Information was collected for the last three years and averaged out. One has to keep in mind that since 1982 continuous drought has affected the areas.

Table No. 5 — End-use of the produces

	1965				1984/85			
	Major		Minor		Major		Minor	
	No.	%	No.	%	No.	%	No.	%
Domestic consumption	6	26	16	69	3	13	5	24
Sales to an agent	11	74	4	31	10	87	7	76
Sales in the local market	6		3		10		9	
	23		23		23		21	

Table No. 6 — Income (from all sources)

Range (pm)	1965-66	1984-85
less than R.250/-.	13	15
251-500	5	7
501-1000	6	1
above R.1000/-.	1	2
	25	25

Table no. ~~6~~ 7 — Availability of trees on their own lands

	1955		1965		1984-85	
	No.	%	No.	%	No.	%
Yes	9	36	10	40	6	24
No	16	-	15	-	19	-

...ICER
...Forks Road
...COMMOD
...ATIS
...Bangalore

COMMUNITY DEVELOPMENT CELL
47/1, [illegible] Rocks Road,
Bangalore - [illegible]01.

76 percent of the respondents did not own any waste lands or grazing lands (19 respondents). Thus, majority hold only cultivable land.

Notwithstanding their land holding they still work as agricultural labourers and this is mainly due to their uneconomic land holding and drought conditions that prevail often in the areas.

3 Produces

In line with their landholding pattern average total annual production is also variant. 12 respondents could produce only 750 kgs p.a. from their land. With single crop cultivation practices and erratic monsoon, total yield per hectare is insignificant.

End-use pattern of the produces is also significant. In 1965, 74 percent of the major produces and 31 percent of the minor produces were sold to others. In 1984-85, 87 percent of the major produces and 76 percent of the minor produces were sold.

This is indicative of the fact that domestic consumption of both minor and major produces have reasonably declined. This is an important trend to note.

On the whole, produces like vegetables are grown and sold in the local market. A ready market of this nature could have tempted the people to opt for selling out the produces for "spot cash". We could not locate any case of 'distress sales' of the produces. Possibly there could be instances which an indepth study could locate.

4 Income

A dependable income range was given by 20 respondents only. For others, the investigator worked out on the basis of the information provided - expenditure, consumption etc - his estimated was verified with the respondents before the conclusion ofthe interview.

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Table no. 8 — Number of trees (in terms of respondents)

Range	1955	1965	1984-85
Less than 5	2	4	4
6 to 15	4	4	1
16to 25	2	1	-
above 25	1	1	1
	9	10	6

ps: Most of the trees are found near the fence posts of their houses or near bunds. hence, they happened to be 'long surviving ones'.

Table no. 9 — Yield from trees

(consolidated)

	Qty. in kgs	Value in Rs.
1955	400	650.00
1965	515	1010.00
1984-85	690	2225.00

Table no. 10 — Enduse of yield from trees

Domestic consumption	..	2 resp.
Sale in the weekly market	..	3 "
Annual lease	..	5 resp.

ps: Sometimes they apportion a few trees' yield for domestic consumption whereas others are given on lease.

Table no. 11 Livestock holdings

Variety	1965 No. of Resp.	1965 Total	1985 No. of Resp.	1985 Total
Bullocks	3	14	3	19
Sheep/goats	12	37	14	61
Cows	4	46	5	72
Poultry	16	123	19	144
Pigs	2	5	2	7

Table no. 12 Veterinary medical facility availability

Within the village	..	4 resp.
within 2 kms	..	3 resp.
within 5 kms	..	6 resp.
More than 5 kms	..	12 resp.

Table no. 13 Fodder consumption (average p.m.)

	1965 Qty.	1965 Value	1985 Qty.	1985 Value
Grass	3120	156	4910	1965
Agricultural waste	104	31	190	380
Chemicals	16	64	67	1600
	3240	251	5167	3945

Key: Qty. in kgs; value in Rs.

15 respondent families have less than Rs.250/-. p.m. Only 3 families earn more than Rs.500/-. With an average family size of 6.7 majority of them will have to be content with an income of less than Rs.500/-. p.m.

5 Livestock

All respondents own livestocks' of one variety or other. Those who are comparatively better-off owned buffaloes or bullocks or cows. It was found that with increase in income range there is a corresponding increase in owning either cows or bullocks. Those who are in the lower income rangeowned more poultry, sheeps and goats.

Thus, animal husbandary is accepted to be a sound way of supplementing their family needs. It could be safely concluded that this provides an auxilliary source of livelihood which still, to an extent, remains unexpressed source of income.

6 Wasteland utilisation

It was understood during the course of the interview and discussions that till 1976 or so (Emergency was quoted as the cut-off period) utilisation of wastelands in the village did not attract much attention either from dominant villagers or from the Government. But there were unwritten/untold regulations which guided the people.

Since 1976 both Government and the dominant classes in the villages have either converted wastelands into cultivable ones or have increased their wasteland holdings. (This could possibly be attributed to the rigorous implementation of Land Reforms during that period when the big land owners feared that they might lose some of their cultivable lands. Hence, they made all out efforts to increase their land holding through other means).

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In 4 villages, high caste people have played key-role in giving wasteland to the Forest Department for using under Social Forestry programme. For example, at Belliganur none of the Adi Karnatakas or Lambanis were informed of the move to give 750 hectares of land to m/s Mysore Paper Mills Ltd for planting eucalyptus. This was earlier used by <u>all</u> the people in the village for grazing etc.

7 Forests

All the respondents were nearer either to major or minor forests. The distance between their residence and forests is an interesting matrix/phenomenon.

In 1965, 14 respondent-families had forests within a range of 1 km; in 1985, 12 respondent-families have forests beyond 5 kms.

With forests moving away from their habitations, frequency of visits to forests have been reduced amongst various categories. Now, it is the children who visit often. Trips are made to 'gather' firewood, fodder etc at least on alternate days; this they do mostly along with grazing of cattle.

Interesting responses were received as to how those lands which were earlier forests (minor or major), now denuded, are presently utilised. A summary of their replies were :-

1. encroached by dominant families in the village;
2. panchayat has taken possession and allotted for grazing on 'lease' basis;
3. Government has taken over and yet to be distributed to people; meantime, community controls usufructs;
4. still classified as forests; occasional grazing is possible by anyone in the village.

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Table no. 14 — Forest availability

	1965		1985	
	No.	%	No.	%
Within 1 km	14	56	3	12
upto 2 kms	6	24	4	16
within 5 kms	5	20	6	24
above 5 kms	-	-	12	48
	25	100	25	100

Table no. 15 — Frequency of visits per week

(by any member of the family)

	No. of respondents for gathering firewood	for other purposes
Once	nil	2
Twice	4	2
Thrice	17	-
four times	3	-
five plus	1	-
	25	6

Note : Even the families which purchase their firewood requirements visit the forests and gather firewood not necessarily to save money, but as a matter of routine or tradition.

Table no. 16 — Who maintains the forest ?

Forest department	..	12	resp.
Village level admn.	..	7	"
Others	..	5	"
Not known	..	1	"

Theoretically, the number of families depending on forests has declined. Though no specific data was collected, it was found during the interviews and discussions that people no more perceive forests as their "resource". This is also indicative of the decline in the frequency of visits. With no alternatives emerging, in practicality, they still do not mind travelling 5 to 6 kms to gather firewood etc.

8 Tree Cover

Trees are owned only by respondents owning more than 5 hectares, generally planted on the bunds or near fence posts. They could not furnish the age of the trees.

Fruit-yielding trees like tamarind, mango and the like are normally given on lease. Other produces are either sold entirely in the weekly market or part set aside for domestic consumption. Respondents were unable to give a ratio between the above two. Deadwood from these trees are utilised as firewood.

The tree cropping intensity is low in the home gardens in all the villages. Slow-growing trees such as neem, woodapple, margosa are preferred to quick growing trees. It is difficult to ascertain accurately the villagers' attitude towards tree covers in other areas such as community lands etc.

9 Firewood Sources

Twigs/deadwood, Jaliwaste and Sarkar jali were reported to be the major firewood sources for domestic purposes. 408 kgs are consumed per household on an average in a month for firewood purposes from all sources. Per capita consumption of firewood is Rs.70.74 p.m. on an average among the survey sampling population.

Table no. 17 Firewood sources and pattern

(immediate last three months were taken and averaged out)
per family p.m.

Variety	Q kgs.	Value in R.
Jaliwaste (after use)	59	118.00
Sarkar jali	9	45.00
Twigs/Deadwood	275	166.00
Coconut leaves	-	-
Thogari	15	65.00
Cotton mensu	25	40.00
Cowdung	25	40.00
	408	474.00

On an average in a year 4891 kgs are consumed per household.

Table no. 18 Annual Cropwaste Sources (pa)

Immediate last 3 years waste sources were averaged out.

	No. of resp.	In cart loads	Avg. per res. in cartloads
Firewood			
Cotton mensu	3	47	15.5
Thogari	6	12	2.0
Fodder & others			
Jowar	3	20	7.0
Paddy	5	8	1.6
Groundnut	2	17	8.5
Others (ragi)	6	18	3.0

Note : Respondents could not furnish value.

10 Firewood collection

More visible shifts have come into being in the firewood collection category. It was women who spent more time collecting firewood in 1965. In 1985, it is children who spend more time collecting firewood from forests or wayside lands. This shift has to be seen from two features :-

1. children, now, have the advantage of collecting firewood when they go out for grazing the cattle i.e. grazing of cattle has now a necessary accompaniment of gathering firewood;
2. availability of more children to do odd jobs like pickings (this is indicative of the high percentage of school dropouts in the areas).

Respondents also informed that the quantity gathered are not identical or same as what it used to be earlier. In point of fact, children spend more time less quantum of deadwood/twigs and the like.

A household in general spend 975 human hours in a year gathering materials for firewood from all sources.

11 Cropwaste sources (annual)

Only 19 respondents could answer and quantify the availability of cropwaste sources; this is partly due to their perceptual confusion between cropwastes which could be utilised and others. Further, many of them sub-consciously use cropwastes.

Cropwastes either from their own land or received from others form a minor source of energy and fodder among the rural milieu. In past cropwastes were given to the agricultural labourers as 'gratis' by the landlords after harvest. Now, there have been attempts to price them; which has in fact taken place in a few villages.

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12 Fodder

On an average a household in the area consumed 157.80 kgs of fodder p.m. in 1965 valued at R.10.04; In 1985, it was 206.66 kgs valued at R.157.80. The increase in the value of fodder is due to commercialisation of fodder in the intervening period.

In 3 villages visited, dominant families export fodder and allied goods to nearby markets. This in fact has become a potential market for them.

Only 2 families, now, utilise artificial fodders. Further, no one purchases their requirements except those who utilise artificial fodder.

13 Firewood Market

Only 4 respondents sell the firewood they gather. Of them 2 were Lambanis carrying out their caste occupation; the other 2 have found in firewood gathering and selling a good source of employment and income - this is due to abundant availability of firewood in the area.

All the four respondents are from different sampling areas. Interestingly all of them sell their gatherings at the weekly markets only.

The investigator had an opportunity to spend time at the weekly markets and observe selling operations/modes of firewood and workout the dynamics involved.

There are instances when the respondents sold the firewood collected to the nearby end-users directly. These end-users form a small proportion to the total sales.

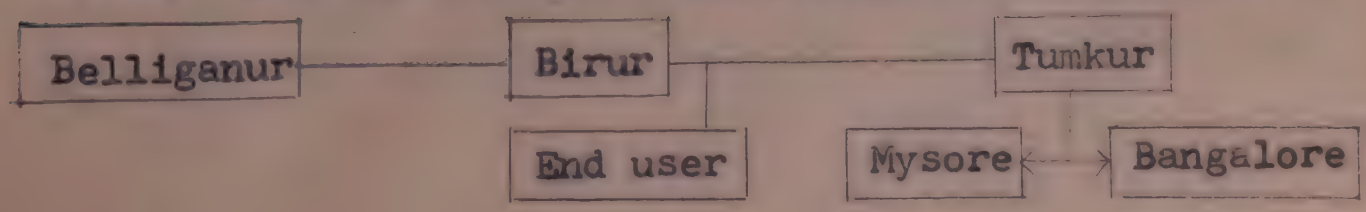
Belliganur Collector	(2)	Birur Retailer	(4)	Produces rebundled and transported to Tumkur & Chitradurga	
(1)					
	(2)	Birur Consumer	(5)	Industries or Brick kilns near/in Bangalore	
	(3)	Enduse Domestic Localuse	(6)	Hotels, Industries, Construction activities	

SAMPLE PICTOGRAM ABOVE SHOWS THE ROUTE THROUGH WHICH THE FIREWOOD PASSES.

Selling prices at various points

Reference point no.	1	Sells at 60 paise per kg
	2	Sells at 90 p per kg to Ref. pt. 3
	4	Ref. pt, 2 sells to Ref. pt. 4 @ Re.1/-. per kg.
	4	Ref. pt. 4 sells @ Rs.1.40 per kg to Ref. pt. 5
	5	Ref. pt. 5 sells either at Rs.2/-. or Rs.1.80 per kg depending upon the consumer.
		At Bangalore it is mostly sold at Rs.3.25 to 6.50 per kg depending upon the variety and demand.

A more clear and simple route-pictogram is as follows :-



SIMPLE DIAGRAM MADE FROM THE WORDS GIVEN IN THE TEXT

(1) (2) (3) (4) (5) (6)

On the day of visit at the Belliganur/Birur weekly market we found 3 big traders operating - purchasing from villagers' gatherings who had carted the firewood on bicycles; 4 other medium scale middlemen were also seen. During informal discussions we were informed that the big traders purchase around 30 cartloads of wood each day (5 to 6 lorry loads) from villagers and send to Tumkur or Chikmgalur or Mysore either for local use at the destinations or for onward transmission. They do not deal in logs or furniture woods. In fact, entire trade at the 3 Centres we visited was only of chipped woods to be used as firewood.

According to our respondents and traders, log trading was carried on by the contractors who have mechanical facilities to process the logs. Such dealers do not deal in firewood.

One interesting information received during the interview was at Aladahalli (Birur). Here the forest guards permit local people to cut woods and cart them out on a bullock cart provided the wood-cutter pay a sum of Rs.40/-. per cartload to the Guard. Our respondent Shri Ropala, a Lambani, when in need of money resorts to such a method.

14 Domestic Energy Consumption

Major share of resources are spent on cooking and allied activities only. All the respondents use kerosene but the quantum varies. Mostly kerosene is used for lighting purposes only.

Except kerosene other resources are not purchased. Only 3 respondent-families resort to purchasing of firewood etc.

15 Housing

8 respondent-families are residing in Kaccha houses; 11 of them (44 percent) had semi-kaccha houses built using locally available materials like coconut leaves, chip-bamboos etc; and majority of them are fenced using sarkar jali freely available in the villages.

Wood use in the construction of their houses is nominal; wood is used only in the initial stages of construction. On annual maintenance most them spend, or use materials worth, less than Rs.200/-. on wood or wood products.

16 Social/Farm Forestry

23 (92 percent) of the respondents were aware of the SF/FF schemes envisaged by the State Government; but only 3 (12 percent) were willing to participate. Private planting in the areas is confined to eucalyptus, accacia, subabul and other long-standing varieties; but eucalyptus forms the majority.

The high rate of averse-attitude to participate in SF/FF schemes can be attributed to the awareness created by the voluntary groups working in the area; further, the respondents in general were small land holders who cannot alienate their land from annual crop-cultivation as planting of trees would mean income at an undetermined date.

Reasons for participating in SF/FF programmes also vary, a sample of which are :-

1. had land which remains uncultivated for sometime;
2. had no one to look after agricultural operations;
3. eucalyptus was planted in the nearby lands; hence, villagers advised to plant in their own land too.

Table no. 19 Profile of domestic energy consumption

a. Cooking purposes

Firewood	.. 21 resp.	..	100 % use
Firewood and others	.. 4 resp.	..	Firewood 82 percent and the rest.

b. Lighting purposes

Kerosene	.. 25 resp.	..	100 percent use.
Veg. oil	.. 3 resp.	..	partial use.

c. Waterheating purposes

Firewood	.. 25 resp.	..	100 percent use.

Quantity varies with respect to usage of kerosene. Most of the families (21 resp) use only 3 litres a p.m. on an average.

None of the respondent has received free-seedlings from the Forest Department. Even those who have planted eucalyptus or accacia bought the seedlings from a local nursery for a price.

Officials from Forest Department had visited the villages at regular intervals. They seem to have allayed the fears expressed by the people stating that :-

1. eucalyptus requires only a 3-year gestation period after which there will be free availability of fodder;
2. eucalyptus plantation does not affect growth of other crops;
3. land on which eucalyptus is planted will be returned to the villagers after cutting the produces and the land would be suitble for food crop cultivation.

There were hoardings and posters publicising social forestry schemes and benefits in 5 villages which we visited. In a specific village, the school teacher has been requested by the FD to motivate pupil to participate in SF/FF schemes. This teacher, it was understood, has asked the pupils to plant eucalyptus in a nearby area.

None of the villages had formed Village Committees for maintaining and monitoring Social Forestry programme in the area under the guidance of FD officials.

None of the respondent was able to say where they could market the produces grown under SF/FF programmes. They are of the opinion that Forest Department will purchase the produces from them.

17 Miscellaneous

1. The availability of water for domestic use in all the villages is far from satisfactory. The water turns saline during the dry season (about 8 months a year) and a few families have to depend on tanks for their requirements.

2. After completing the survey and discussions with all the respondents, others in the village, officials it was computed that an exploitation cycle of ten years with 2,000 trees planted on 90-95 hectares of land would be necessary per village. If trees are also to be grown on roadside leading to the villages and within the villages and along fences, it was estimated that 1,000 trees per village would be required.

3. Fodder requirements of a village and its exploitation cycle are comparatively easy to compute since they involve annual cycles. On an average, a village requires 125 hec. of land for grazing purposes assuming cent per cent coverage in the area.

   Unfortunately none of the villages visited had cent per cent availability of fodder resources. This is more so in the drier areas like Dharwad and Bellary districts.

4. Presently, two human days (minimum) are spent in gathering firewood for weekly requirements of a household.

   People are well aware that deforestation and monopoly of forests by the government, commercialisation of firewood and fodder might make cooking a difficult problem for them in future.

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FINDINGS IN A NUTSHELL

Results and experiences of the Pilot Study need to be discussed in light of five parameters viz :-

1. Reliability of data collected;
2. Suitability of data collected;
3. Adequacy of data collected;
4. Time factor;
5. Unique experiences.

While results are not uniform, and therefore generalisations have been avoided.

1. The present survey was planned to be a "Focused interview". But during the pilot study it turned out to be a "Free story" style where the respondents narrated a mass of information - many of which could not be quantified or correlated - which were informative. True, it was time-consuming. This investigator mid-way through the study preferred and adopted "aided recall, recognition and identification" techniques where possible. In terms of time consumption and mass of notes matters became worse.

   An ideal blend of technique has to be developed wherein important points could be recorded, and investigator trained adequately to meet the field demands.

2. Respondents communicated with gestures, expressions, tone and silence and like typical to their culture. These were more when a group was present during the interview. It was a group which attempted to answer the questions many a times. Enough steps were taken during the pilot study to avoid such "group responses".

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Given the rural set up, it is necessary to develop chorus reponses and single reponses, and quantify chorus responses only where applicable and absolutely essential in explaining the data collected.

3. Since cent per cent survey is an impossibility, different types of sampling and their applicability need to be discussed in light of pilot study experiences. Apart from the stratification method discussed elsewhere, following could be useful modes for the final study :-

a. <u>Area sampling</u>

Total area could be divided into smaller non-overlapping areas (called as 'Geographical Clusters'), then a number of these smaller areas are randomly selected and these smaller units are included in the sample. It would make fieldinterviewing at each of the location more efficient as the interviewer can do many interviews.

b. <u>Multi-stage sampling</u>

Large primary sampling units could be selected and divided into smaller units from wherein households are selected on random sampling basis.

Whatever be the sampling technique, stratification process stated elsewhere should be the guideline.

4. Question sequence of the present schedule seems to be clear and smooth-flowing. In general, schedule was realistic. A couple of questions need to be rephrased to meet the local demands.

A few catch words could be included to elicit direct replies. For example, (i) what is your opinion about present forestry schemes in your village ? (ii) Who will benefit from the produces generated from the scheme ?

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5. Reporting There was a natural bias in sampling. Schedules were administered mostly to rural poor and men alone. In the final study, a mix of rural poor and rich along with a share of women will have to be interviewed. This is more so since women involve in gathering firewood, grass etc.

6. Responses pertaining to past years, at times, turned out to be guess-works or 'tabulated memory'. It is necessary to keep a flexible approach wherein historical facts are recorded eliminating guees works.

7. Many a times respondents related "events" as cut-off period while identifying change processes (eg) birth of a child at home; change of government at local level. A suitable mechanism has to be developed to train the investigators to record these events in a common way.

8. At times respondents were reluctant to express strong negative feelings; this was more so in a couple of questions like (i) will they participate in SF/FF programmes ? (ii) Are they aware of the effects of participating in SF/FF programmes ?

9. Situational factors also came in the way in expressing negative feelings. Presence of an Animator from the local voluntary agency, in few cases, placed strain during the interview and there were distorted responses. These are all observational factors. Here the interviewer being the researcher it was possible for him to identify the trends and reject the schedules or recheck the data presented. In case of final study ways and means will have to be worked out on minimising such situational factors.

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10. Confidence limits This was very low wherever data provided related to years like 1955, 1965 or so. The investigator, in the present case, worked out at times and verified with the respondents. May be this column could be scrapped. Similarly, income and production figures were guess works in a few cases.

Otherwise, the responses were clear and within confidence limits.

11. There were quite a few statements made on chemical fertilisers during the interview. For example, (i) chemical fertilisers are rendered destructive in the absence of assured irrigation; (ii) gradual depletion of tree wealth, both in the farm land and in the forest areas drastically reduce the availability of organic inputs that maintain the balance between soil fertility and moisture.

The present schedule has no provision to enquire into these aspects. If need be a question could be added to find the depth of knowledge about chemical fertilisers or knowledge about local manures etc.

12. Code of Conduct People are weary about researchers. This is possibly due to their past experiences or ignorance. It is true, there does not exist a code of conduct for researchers.

The present having been initiated by committed, motivated people it is necessary that the people are included as "participants" in the study. This need not necessarily lead to 'participatory research' techqniques which will be time-consuming; but this 'participation' of village people in the study is significant from people's point of view and in the long-term objectives.

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13. In the opinion of us, "community participation" in social forestry programmes has become a near impossibility since :-

a. when mistrust of the system for ensuring equitable distribution of produce from community wood lose prevails;

b. shortage of panchayat funds for payment of labour and protection of plantation does not facilitate village wood lots. That is a cycle which can't be solved only through social forestry;

c. social forestry has become "cash generating" contrary to "basic needs generating"; those who are poor and worried about their 'present' cannot be motivated to participate;

d. the role of landless, who constitute the majority, is vague.

14. Village Profile The entire schedule, in our opinion, has to be rephrased and recast. Its utility value also became debateable at various stages of our study. Many of the responses were basically assumptions. For example, 'what is the total area of gomal lands (community lands) in your village ?' Responses varied from 30 hec. to 450 hec. The distinction between various class of lands is often blurred in local perceptions. If nearer to village, all lands are subject to traditional usufruct arrangements. Hence the extent of land varies according to his/her perception. If need be the entire profile could be disponsed with.

In view of the above, no specific comments on the profile has been made.

15. A brief on interview/discussions with officials

a. None of the officials met could state the difference between classical forests and social forestry.

b. They view the social forestry programme either as a charity scheme to help the rural people or a subtle way designed by the Government to implement land reforms. This latter view, in their opinion, has created panic among the dominant castes in certain villages. No one was able to explain how land reforms could happen.

c. Most of the officials at range or block level were given targets to be achieved. There ends guidelines or orientation. They were unable to inform us how social concepts will be introduced in the programme, what would be concepts and the like.

Incidentally, two officials stated that social forestry is part of IRDP schemes.

d. Most of them were eager to include school teachers for motivation and implementation purposes.

e. In two villages (Belliganur and Jambani) eucalyptus has been planted under its botanical name which the people would have never heard. When contacted and cited, the local officials dismissed the incidents as a 'mistake of fact' at local level.

f. None of the officials were able to say where the produces would be marketed.

Present schedules do not have a provision to interview officials. It would be a wise decision to include a few discussions with officials at range level to understand the process.

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APPENDIX : I

A. Land characteristics (collected from officials)

Sagar The soils are lateritic in origin and acidic as nitrogen and potash contents being more with a very low content of phosphorus in all types of lands. In parts, soil is soft and sandy, reddish in colour.

Shikaripur The soils are acidic in 2/3rd of the areas; a part water-logged too.

Kadur The soil is mainly neutral in regard to soil reaction. A few patches are claimed to be alkaline. The soluble-salt content is low, but within safe limits. The soils near the hill area are well supported with organic matter.

Harihar River alluvium of good quality was found in the villages visited, which may be due to nearness to Tungabhadra and its tributaries. Lands are mainly alkaline but with varied tracts.

Davanagere Areas visited had mixed soil conditions. In western parts it was black soil rich in bases; deep red loam variety is found in some parts. Rich clay deposits are also found in some parts.

Harpanahalli Sandy and red loamy, and black loamy soils were found in the villages. These are suitable for cultivating cotton, ground nuts and millets. The villages visited are not self-sufficient in forest produce. The existing vegetation is a very poor type containing mostly species capable of giving only fuel of low quality and some of the minor forest produces such as soura grass, beedi leaves, barks etc. Conservative estimates put that the taluk imports around 5007 MT of firewood from the adjoining Dharwad district.

B. Interesting information collected - from village profile

1. Jambane - Sagar Taluk - Shimoga district.

Survey no. 80/82 .../

.../

2,500 acres of thick forests containing vanaspathi and medicinal herbs are allocated for SF/FF. One Dr Anand Alwar has identified nearly 141 varieties of medicinal herbs in this forest area.

SF/FF scheme is yet to start. 65 idiga families live with a total population of 400. 500 acres of land in this village are irrigated by kerai.i

2. Halulkhalli - Sagar Taluk - Shimoga district.

Survey no. 18/19 admeasuring 328 acres of land are allocated for SF/FF; the soil has been sent for testing and was found to be suitable for cultivation of food crops with a little effort.

In a nearby village, Kunihatti, 374 acres are allocated for SF/FF where a similar situation exists.

At Talavatta village of the 500 acres set aside (surveyno. 258 and 260) in 260 acres Soapurbetta is growing and the rest Government has 'gera' plantations.

3. At Bethe - Dharwad Taluk - Dharwad district.

3,000 acres are under eucalyptus plantation under social forestry programme. Peoples' participation is nil. The official whom we met during the discussions questioned why should local people participate when the planting is progressing smoothly ?!

DATA SHEET

(Household Survey Schedule)

01 General Information

1 Serial number :-

Name of the village :-

2. Name of the Respondent : _____

Age of the Respondent : _____

Caste :-

(Whether carrying on caste occupations if any : _____)

Place of birth of the respondent : _____

Place of birth of respondent's father : _____

Mother Tongue : _____

Marital Status : _____

1 Single
2 Married
3 Widow/Widower
4 Separated
5 Others

3. Family details

S.no.	Relation-ship to HF	Sex	Age	Marital Status	Education	Member of orgn
1.						
2.						
3.						
4.						
5.						
6.						
7.						

...../2

02 Employment and Income

MAIN OCCUPATION

S #	Activity	Nature	Length of service	Hours of work	Place of work	Incom p.m.

SECONDARY OCCUPATION

S #	Activity	Nature	Length of service	Hours of work	Place of work	Incom p.m.

03 Land

	Area in acres	Class of land	Total prodn.	End-use	Income p.m.	Remarks
YEAR : 1955						
Dry						
Wet:						
Season I						
Season II						
Others						
YEAR : 1965						
Dry						
Wet:						
Season I						
Season II						
Others						

...../3

CODE

02. Employment & Income

Activity

1 Agricultural Labourer
2 Coolie (any manual labour)
3 Jeetha
4 Cultivation
5 Small Trade
6 Business
7 Caste Occupation
8 Service
9 Professional (specify)
0 Anyother (specify)

Nature of Employment

1 Permanent
2 Temporary
3 Seasonal
4 Daily-wage-rate
5 Hereditary (specify)
6 Others
7 Self-employed

Length of Service

1 o to 5 years
2 6 to 10 years
3 10 to 15 years
4 above 15 years
5 from time immemorial
6 Others (specify)

Place of work

1 Within the same area
2 Neighbouring area (village)
3 Neighbouring Town
4 Household activity
5 Others (specify)

Income (write actuals in Rs)

03 Land

Class of Land

1 A class
2 B class
3 C class
4 D class
5 Village forests (encroached)
6 Gomal lands (usufructuary only)
7 Others

End use

1 Domestic consumption
2 Sales to an agent
3 Sales in the weekly market (own)
4 Annual lease
5 Auction sales
6 Any other (specify)

Income (write actuals)

Production (write in local weightage measures like Seers, Bags and converted to kgs at the end).

	Area in (acres)	Class of land	Total prodn.	End-use	Income p.m.	Remark
YEAR : 1984-85						
Dry						
Wet:						
Season I						
Season II						
Others						

Are there any trees in your lands ?

1 Yes 2 No

Type of Trees	No. of Trees	Age	Produce	Yield	End-use	Income
YEAR : 1955						
1.						
2.						
3.						
4.						
YEAR : 1965						
1.						
2.						
3.						
4.						
YEAR : 1984-85						

CODE

TYPE	Produce	Enduse
1 Honge	1 Fruits	1 Domestic consumption
2 Tamarind	2 Branches/ Twigs	2 Sales to an agent
3 Mango	3 Tree itself	3 Sales in the weekly market (self)
4 Neem	4 Others	4 Annual lease
5 Casurina	5 Leaves	5 Auction sales
6 Coconut		6 Any other (specify)
7 Eucalyptus		
8 Accacia		
9 Others (specify)		

Irrigation facilities

Type	No. of crops	Available since (yr)	Any failures	Prodn./ crop	Acrage of land
Tank					
Open well					
Bore well					
River					
Lift Irrigation					
Any other					

...../5

04 Livestock

Do you own livestock ? If yes, give details.

Variety	Nos.	Prodn.	FODDER Type	FODDER Qty.	No. of hours spent on maint.	Reasons for pur
YEAR : 1955						
1.						
2.						
3.						
4.						
YEAR : 1965						
1.						
2.						
3.						
4.						
YEAR : 1985						
1.						
2.						
3.						
4.						

CODE

Variety

1 Buffaloes
2 Goats
3 Sheep
4 Poultry
5 Pigs
6 Others

Reasons for purchase

1 To subsidise family ~~x~~ income
2 Gainful investment
3 Free land/human hour availability
4 Loans were available
5 Family tradition
6 Others (specify)

Where do you get medical care for the livestock ?

...../6

05 Energy

a. Profile of domestic energy consumption

Purpose	Kerosene	Electricity	Veg. oil	Veg. waste	Shrubs/ Twigs	Dead Wood	Any Other
Cooking							
Lighting							
Waterheating							
Festivals							
Others I							
II							
Total :							

(collect quantity used; also note price factor of the materials simultaneously)

b. Where do you get the energy requirements ?

1.
2.
3.
4.
5.
6.

c. Energy consumption p.m.

	1955	1965	1975	1984-85
Kerosene				
Electricity				
Twigs/Deadwood				
Cowdung				
Veg. oil etc				
Others				

d. Details of firewood sources

Variety	Year : 1955		Year : 1965		Year : 1984-85	
	Q	V	Q	V	Q	V
Mango						
Tamarind						
Honge						
Casurina						
Eucalyptus						
Coconut leaves						
Grapewine						
Mulberry						
Others I						
II						
TOTAL :						

Human hours spent collecting : Man Woman Children

e. Details of annual crop-waste sources (from agricultural land)

Straws	Quantity	Value
Ragi		
Jowar		
Paddy		
Maize		
Others		
Leaves I		
II		

06 Forest produces

a. Is there a forest in your village or near your village ?

1 Yes 2 No

b. If yes, give details.

i. How far is it from your house ?

ii. How often do you visit this forest ?

iii. What are the kinds of forests in your village ?

iv. Who is maintaining this forest ?

c. Give details of minor forest produces collected

Variety	YEAR : 1955	YEAR : 1965	YEAR : 1984-85
1.			
2.			
3.			
4.			
5.			

d. Give details of firewood produces collected from forest

Variety	YEAR : 1955	YEAR : 1965	YEAR : 1984-85
1.			
2.			
3.			
4.			
5.			

e. Do you sell any of your firewood produces collected ? If yes, give details.

Produce	Quantity	Value	Sold at/to	Reasons for selling
1.				
2.				
3.				
4.				
5.				

When did you start selling the firewood collected by you ? Why

07 General : Transport (wood based only)

Do you own any vehicle ? If yes, give details.

Type of vehicle	Made out of (mtl.)	Purchased from	Year of purchase	Value	Remarks
1.					
2.					
3.					
4.					

General : Housing

1. a. Type of house

1 Pucca 2 Kachha 3 Semi-Kachha
4 Fenced 5 Others

b. If fenced - write the material used (qty. and value note)

2. Own house : Yes : _____ No : ____

3. Materials used for construction (note the predominant material)

1 Tiled 2 Terraced (RCC) 3 Thatti 4 Straw
5 Leaves 6 Others (specify)

4 Money spent for periodical maintance :- (p.a.)

1 Less than Rs.100/- 2 101 to 300 3 301 to 750
4 751 to 1,000 5 1,000 to 2,000 6 above 2,000/-.

c. General : Agricultural implements

Do you own agricultural implements made of wood ? If yes, give details.

Type	Made of	Value	Maintenance expenses pa	Remarks
1.				
2.				
3.				
4.				

08 Social Forestry

1. Do you know about the proposed Government scheme of Social/ Farm Forestry ?

2. Will you participate in it ?

3. If yes, why ? If no, state your reasons.

Yes/No	Reasons	Remarks

4. Did you ever plant eucalyptus in your village/your lands ?

1 Yes 2 No

If yes, since when, quantity planted, how seedlings received etc please detail out.

5. Did you ever receive free seedlings from the FD's Nursery ?

Type	Year	Nos.	Production	Reasons
1.				
2.				
3.				
4.				
5.				

...../11

6. Who advised you to participate in the Social forestry scheme ?

1 Self decision 2 Friends/Relatives 3 Village elders
4 Forest dept. officials 5 Factory Representative
6 Agricultural Exten. Worker 6 Others

Who advised tyou to get the seedlings from the Nursery ?

What are type of seedlings you normally ask for in the Nursery ?

Are you able to get the seedlings what you ask ?

If no, what reasons are given ?

Which type of seedlings are normally available in the Nursery ?

7. If the Government asks you to plant Eucalyptus or anyother trees in C & D class of lands and in Gomal lands, w will you do so ? If so, which variety, how much,...

Variety	Quantity	Land	Reasons

If planting the trees as required by the Government, where do you expect the sell the produces ?

For what reasons in your opinion it is necessary to plant Eucalyptus in C & D class of lands ?

VILLAGE PROFILE SHEET

Name of the village :- Block :-

Hobli :- Panchayat :-

Taluka :- District :-

01 Demographic Details

a. Total Population :
Total Male Population :
Total Female Population :

b. Total Child Population (age below 5 years) :

Total aged population (above 60 years) :

c. Population details - subcaste-wise

Sub-caste	Population	SES Scale	Remarks
i.			
ii.			
iii.			
iv.			
v.			
vi.			

d. Density of population(neighbouring land-wise)

Type of land	Density	Caste
Wet		
Dry		
Village Forests		
Minor Forests		
Others		

...../2

02 Agriculture and Irrigation

a. Describe briefly the characteristics of land in the village ?

b. What are the types of lands in the area, detailed out.

Type of land	Crops grown	Crops that could be grown	Irrigation

c. What was the water table 30 years ago ?

What is the water table now ?

If there is any change, reasons for such a change ?

d. Are there any perennial rivers in the village ?

e. Is there any canal system exist in the village ?

f. Is there any new irrigation system planned or underway or approved to benefit the village ?

Scheme	App. acre	Remarks

g. Detail out the years during which the village was affected by drought, famine or floods ?

Year	Nature	How overcame	Possible reasons	Remarks

. What is the extent of Gomal lands in the village ?

Who was, and is, incharge of the administration of Gomal lands ?

How decisions are taken regarding Gomal lands (its usufructuary, cutting, maintenance etc).

Was there anytime people refused to obey the decisions made ?

Any land pattas given out of Gomal lands, detail out ?

Is there any encoroachment of Gomal lands ?

If a single piece of Gomal land exceeds 25 acres, detail out who lives in the following directions adjacent to it ?

South	North	West	East

. What are the tree-crops normally grown in the villagem and in which land are they grown ?

Tree variety	Land	Nos.	Production	Remarks

If the tree belongs to the community, how usufructs are determined ?

...../4

j. Was there any time mono-crop cultivated in the area ?

Brief the general cultivation practices in the area ?

Are these practices generally prevalent in the neighbouring villages also ?

How shift in crop-cultivation were came into being in the past ?

How new cultivation practices are adopted ?

k. Is there an agricultural extension wing covering the village ?

If yes, detail out.

Since he the village is covered :-

Frequency of the visit of AEO :-

What he generally advises :-

List out the benefits derived out of his visits :-

Others :-

l. Which is the nearest fertiliser depot in the area ?
Map out the business ranges, techniques etc.

What are the general local manures used, and for what crops?

Type of manure	Crop	Source	Qty.

What is the level of fertiliser consumption in the area ?

3 Forests

a. Is there any forest in the village?

How it is maintained, usufructs determined etc - detail out.

Is there any move on the part of the people to increase the forest area ?

b. Which is the nearest Nursery to the village ?

Do the villagers get any free-seedlings from the Nursery?

Variety	Quantity	How motivated	Annual yield, if any

c. Do the people aware of the present Social/Farm Farestry Schemes?

If yes, what is their reaction ? Are they agreeable to plant any of the trees suggested by the Forest Dept. ?

How the people are 'motivated' in adopting the Scheme ?

Is there any response to this Scheme from the neighbouring villages ?

04 Education

Visit the School/s in the village and obtain the following details :-

- enrolment figures each class since 1956 or inception;
- number of students who joined High School or Junior College after being a Student of this School;

...../6

- grant received per year.
- participation of the villagers in running the School;
- isthere any adult education or NFE Centres/Classes in the village;

05 General

- What were the important events in the area ?
- Participation of villagers in political activities since 1955;
- Any Mahila Mandals, Youth Clubs, Co-operative Societies etc - have informal discussions and brief out;
- cultural activities of the people in general and their talents etc;
- religious festivals, jatras,.....
- economic level of the people;
- energy sources and general consumption level;
- livestock holdings in the area - level, production etc.

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